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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,145	08/17/2001	John N. Feder	D0020 NP	5154

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[REDACTED] EXAMINER

JIANG, DONG

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1646

DATE MAILED: 08/18/2003

(J)

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/932,145	FEDER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Dong Jiang	1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-29 are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

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 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### **Election/Restrictions**

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10, drawn to a purified polypeptide, and a pharmaceutical composition thereof, classified in class 514, subclass 2.
  - II. Claim 11, drawn to a purified antibody specific for the polypeptide, classified in class 530, subclass 387.9.
  - III. Claims 12-20, drawn to a purified polynucleotide, a vector containing same, a host cell thereof, and a method of recombinantly producing the encoded polypeptide, classified in class 435, subclass 69.1.
  - IV. Claims 21-24, drawn to a hybridization probe or primer, and a method for detecting a polypeptide by hybridization and PCR assays, classified in class 435, subclass 6.
  - V. Claim 25, drawn to a method for detecting the polypeptide with an antibody, classified in class 435, subclass 7.1.
  - VI. ~~Claims 26-29, drawn to a method of identifying ligands of the polypeptide,~~ classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because:

The polypeptide of Invention I is related to the antibody of Invention II by virtue of being the cognate antigen, necessary for the production of the antibodies. Although the protein and antibody are related due to the necessary steric complementarity of the two, they are distinct inventions because they are physically and functionally distinct chemical entities, and because the protein can be used another and materially different process from the use for production of the antibody, such as in a pharmaceutical composition in its own right, or in assays for the identification of agonists or antagonists of the protein.

The polypeptide of Invention I is related to the polynucleotide of Invention III by virtue of encoding same. The polynucleotide has utility for the recombinant production of the protein in a host cell. Although the polynucleotide molecule and polypeptide are related since the

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polynucleotide encodes the specifically claimed protein, they are distinct inventions because they are physically and functionally distinct chemical entities, and the protein product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the nucleic acid may be used for processes other than the production of the protein, such as nucleic acid hybridization assay.

The method of Invention III is related to the polypeptide of Invention I as process of making and product made. The Inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP 806.05(f)). In the instant case the product as claimed may be isolated from their natural source or made by chemical peptide synthesis.

The polypeptide of Invention I is distinct from and unrelated to the probe and primer of Invention IV because they are physically and functionally distinct chemical entities which share neither structure nor function. Also, neither is required for the manufacture of the other. The method of Invention IV is distinct from and unrelated to the polypeptide of Invention I because the polypeptide may be neither made by nor used in the method.

Invention I is distinct from and unrelated to Invention V, wherein the polypeptide of Invention I is neither made by nor used in the method of Invention V, and wherein each does not require the other.

Invention I is related to Invention VI as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used for generating the antibody of Invention II.

The antibody of Invention II is distinct from and unrelated to the polynucleotide of Invention III, and the probe and primer of Invention IV because they are physically and functionally distinct chemical entities which share neither structure nor function. Also, neither is required for the manufacture of the other. The methods of Invention III and IV are distinct from

and unrelated to the antibody of Invention II because the polypeptide may be neither made by nor used in the methods.

Invention II is related to Inventions V and VI as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used as a pharmaceutical agent in its own right.

Invention III is distinct from and unrelated to Invention IV because they are structurally distinct (full length vs. small fragment), are for completely different purposes, and are used in different processes. As such, they require non-coextensive searches.

Invention III is distinct from and unrelated to Inventions V and VI, wherein the polynucleotide of Invention III is neither made by nor used in the methods of Inventions V and VI, and wherein each does not require the other.

Invention IV is distinct from and unrelated to Inventions V and VI, wherein the probe or primer of Invention IV is neither made by nor used in the methods of Inventions V and VI, and wherein each does not require the other. Further, the methods of Invention IV are separate and distinct from the methods of Inventions V and VI because they have different process steps, different active agents, different starting and ending points, and are for completely different purposes, such that they require separate searches.

Inventions V and VI are drawn to independent methods, wherein each of the methods has different process steps, different active agents, different starting and ending points, and is for a different purpose, such that they require separate searches.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matters, restriction for examination purposes as indicated is proper.

2. Furthermore, regardless of which Invention applicants elect above, further **restriction** is required under 35 U.S.C. 121:

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- A. If Group I, II, V, or VI is elected, applicant is required further to elect *one* specific amino acid sequence with SEQ ID NO:, i.e. SEQ ID NO:3, or 4.
- B. If Group III or IV is elected, applicant is required further to elect *one* specific polynucleotide sequence with SEQ ID NO:, i.e. SEQ ID NO:1 or 2.

The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relationship of Inventions" in M.P.E.P. § 806.05 for inventive groups that are directed to *different* products, restriction is deemed to be proper because these products constitute patentably distinct inventions for the following reasons. Each of SEQ ID NOs is a unique and separately patentable sequence, requiring a unique search of the prior art. Searching all of the sequences in a single patent application would constitute an undue search burden on the examiner and the USPTO's resources because of the non-coextensive nature of these searches.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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**In order to be fully responsive, Applicant must elect one from Groups I - VI, one from Group A, or Group B, even though the requirement is traversed. Applicant is advised that neither I - VI nor A and B are species election requirements; rather, each of I - VI, A and B is a restriction requirement.**

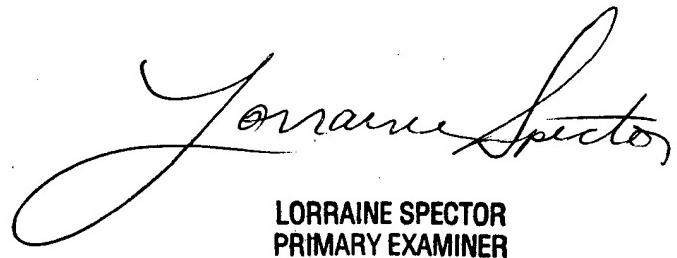
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

**Advisory Information**

Any inquiry concerning this communication should be directed to Dong Jiang whose telephone number is 703-305-1345. The examiner can normally be reached on Monday - Friday from 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for the organization where this application or proceeding is assigned is 703-308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Lorraine Spector

LORRAINE SPECTOR  
PRIMARY EXAMINER

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DJ  
8/14/03